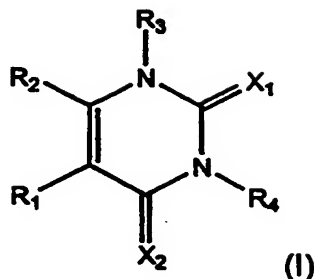


## Claims

1. Compounds of general formula (I)



where

5 X<sub>1</sub> and X<sub>2</sub> are selected between O and S;

R<sub>1</sub> and R<sub>2</sub> are selected between  $-(CH_2)_{13}CH_3$  and alkyl or alkylene groups with from 2 to 6 carbon atoms, linear or branching, unsubstituted or substituted with one or more substituents selected among aromatic, primary, secondary and tertiary aminic, quaternary ammonium, carboxylic, hydroxylic, polyoxyalkyl and ethereal groups, aminoacids, halogen atoms or saccharidic portions, providing that between R<sub>1</sub> and R<sub>2</sub> only one is always  $-(CH_2)_{13}CH_3$ ,

R<sub>3</sub> and R<sub>4</sub> are selected between H and alkyl or alkylene groups with from 2 to 6 carbon atoms, linear or branching, unsubstituted or substituted with one or more substituents selected among aromatic, primary, secondary and tertiary aminic, quaternary ammonium, carboxylic, hydroxylic, polyoxyalkyl and ethereal groups, aminoacids, halogen atoms or saccharidic portions.

2. The compounds of general formula (I) according to claim 1, where:

X<sub>1</sub> = S, X<sub>2</sub> = O, R<sub>1</sub> = ethyl, R<sub>2</sub> =  $-(CH_2)_{13}CH_3$ , and R<sub>3</sub> = R<sub>4</sub> = H (compound 1);

X<sub>1</sub> = X<sub>2</sub> = O, R<sub>1</sub> = ethyl, R<sub>2</sub> =  $-(CH_2)_{13}CH_3$ , and R<sub>3</sub> = R<sub>4</sub> = H (compound 2);

20 X<sub>1</sub> = S, X<sub>2</sub> = O, R<sub>1</sub> =  $-(CH_2)_{13}CH_3$ , R<sub>2</sub> = ethyl, and R<sub>3</sub> = R<sub>4</sub> = H (compound 3);

X<sub>1</sub> = X<sub>2</sub> = O, R<sub>1</sub> =  $-(CH_2)_{13}CH_3$ , R<sub>2</sub> = ethyl, and R<sub>3</sub> = R<sub>4</sub> = H (compound 4);

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$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = n$ -propyl, and  $R_3 = R_4 = H$  (compound 5);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = n$ -propyl, and  $R_3 = R_4 = H$  (compound 6);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = n$ -butyl, and  $R_3 = R_4 = H$  (compound 7);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = n$ -butyl, and  $R_3 = R_4 = H$  (compound 8);

5  $X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = i$ -butyl, and  $R_3 = R_4 = H$  (compound 9);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = i$ -butyl, and  $R_3 = R_4 = H$  (compound 10);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 =$  neopentyl, and  $R_3 = R_4 = H$  (compound 11);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 =$  neopentyl, and  $R_3 = R_4 = H$  (compound 12);

10  $X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 =$  2-phenyl-ethyl, and  $R_3 = R_4 = H$  (compound 13);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 =$  2-phenyl-ethyl, and  $R_3 = R_4 = H$  (compound 14);

15  $X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3NH_2$ , and  $R_3 = R_4 = H$  (compound 15);

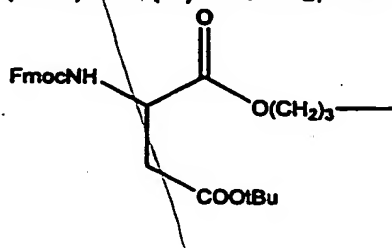
$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3OSiPh_2t$ -Bu, and  $R_3 = R_4 = H$  (compound 16);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3OH$ , and  $R_3 = R_4 = H$  (compound 17);

20  $X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3OC(O)CH_2NH$ -Cbz, and  $R_3 = R_4 = H$  (compound 18);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3OC(O)CH_2NH_2$ , and  $R_3 = R_4 = H$  (compound 19);

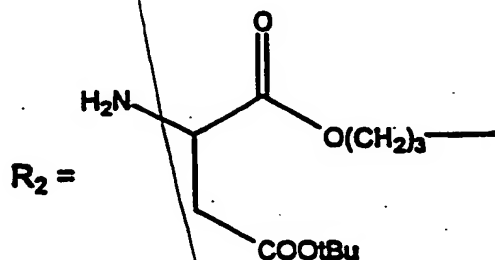
$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 =$



and  $R_3 = R_4 = H$  (compound 20);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$

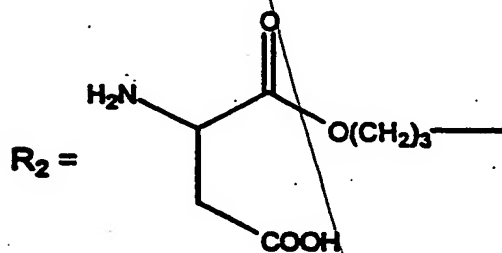
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and  $R_3 = R_4 = H$  (compound 21);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$

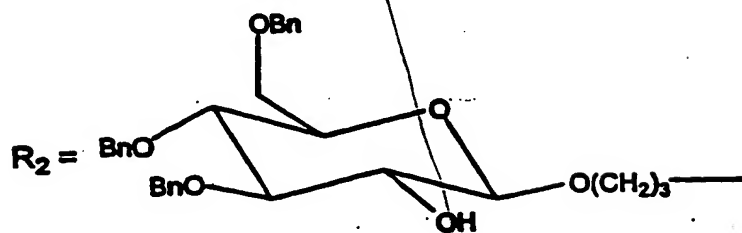
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and  $R_3 = R_4 = H$  (compound 22);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$



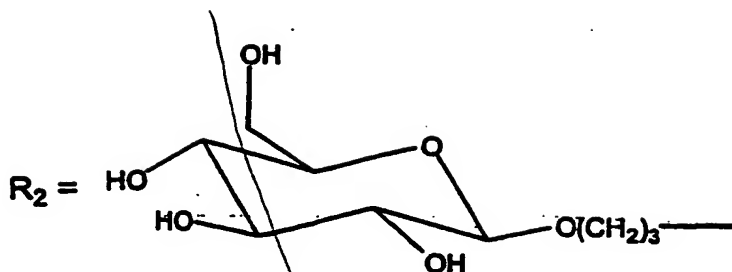
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wherein Bn is benzyl and  $R_3 = R_4 = H$  (compound 23);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = \text{ethyl}$ ,  $R_3 = -CH_2COOC_2H_5$ , and  $R_4 = H$  (compound 24);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$

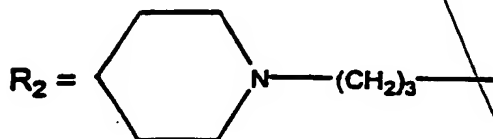
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and  $R_3 = R_4 = H$  (compound 25);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3Br$ , and  $R_3 = R_4 = H$  (compound 26);

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$



and  $R_3 = R_4 = H$  (compound 27);

15  $X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = -(CH_2)_3N(C_2H_5)_3^+Br^-$ , and  $R_3 = R_4 = H$  (compound 28).

3. The compounds of general formula (I) according to claim 1, where:

$X_1 = S$ ,  $X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = \text{ethyl}$ , and  $R_3 = R_4 = H$  (compound 3);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = \text{ethyl}$ , and  $R_3 = R_4 = H$  (compound 4);

20  $X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = n\text{-propyl}$ , and  $R_3 = R_4 = H$  (compound 6);

$X_1 = X_2 = O$ ,  $R_1 = -(CH_2)_{13}CH_3$ ,  $R_2 = i\text{-butyl}$ , and  $R_3 = R_4 = H$  (compound 10).

4. Pharmaceutical preparations including as their active ingredient at least one of the compounds of the general formula (I) described in claims 1-3, and/or their pharmaceutically acceptable derivatives or salts, together with excipients and/or

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diluents.

5. Use of the compounds of the general formula (I) described in claims 1-3 for the preparation of pharmaceutical formulations.
6. The use according to claim 5, for the preparation of pharmaceutical formulations for use in the treatment of tumours.

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